



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region V

**Subject:** POLREP #3  
Progress  
Statoil Eisenbarth Well Response  
TBD  
Clarington, OH  
Latitude: 39.6974000 Longitude: -80.8980000

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**Date:** 2/11/2015

**Reporting Period:** 7/18/14 - 9/8/14

1. Introduction

1.1 Background

<b>Site Number:</b>	C53G	<b>Contract Number:</b>	
<b>D.O. Number:</b>		<b>Action Memo Date:</b>	
<b>Response Authority:</b>	CERCLA	<b>Response Type:</b>	Emergency
<b>Response Lead:</b>	PRP	<b>Incident Category:</b>	Removal Action
<b>NPL Status:</b>	Non NPL	<b>Operable Unit:</b>	
<b>Mobilization Date:</b>	6/28/2014	<b>Start Date:</b>	6/28/2014
<b>Demob Date:</b>		<b>Completion Date:</b>	
<b>CERCLIS ID:</b>		<b>RCRIS ID:</b>	
<b>ERNS No.:</b>		<b>State Notification:</b>	
<b>FPN#:</b>		<b>Reimbursable Account #:</b>	

1.1.1 Incident Category

Emergency Response - Oil/Gas Well Pad Fire

1.1.2 Site Description

1.1.2.1 Location

The STATOIL Eisenbarth Pad is located at 42240 Long Ridge Road, Clarington, Ohio. The pad is located in a rural area with approximately 25 residential homes located within 1 mile.

1.1.2.2 Description of Threat

On June 28, 2014, the Eisenbarth Pad was consumed by fire. Over 16 different chemical products were staged on the Pad at the time of the fire. Materials present on the pad included but not limited to: diesel fuel, hydraulic oil, motor oil, hydrochloric acid, cesium-137 sources, hydrotreated light petroleum distillates, terpenes, terpenoids, isoproponal, ethylene glycol, paraffinic solvents, sodium persulfate, tributyl tetradecyl phosphonium chloride and proprietary components.

As a result of fire-fighting efforts and flow back from the well head, significant quantities of water and unknown quantities of product left the Site and entered an unnamed tributary of Opossum Creek. Runoff left the pad at various locations via sheet flow as well as by two catch basins located at the northwest and southeast corners of the pad.

Opossum Creek discharges to the Ohio River 1.7 miles upstream of a public water intake on the West Virginia side of the river. There are also protected species located down steam of the Opossum Creek confluence with the Ohio River.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

The fire and explosion that occurred on the Eisenbarth Well Pad involved more than 25,000 gallons of various products that were staged and/or in use on the site. Upon USEPA's arrival at approximately 2000 hours on June 28, 2104, numerous fires continued to burn on the pad, uncontained run-off water was exiting the site and entering an unnamed tributary of Opossum Creek and flowback water from the Eisenbarth Well

#7 was spilling onto the well pad.

Initial air monitoring did not detect any concentrations of volatile organic compounds (VOCs) in the community downwind of the site. On June 29th a fish kill was detected on Opossum Creek approximately 3.5 miles downstream of the site.

See POLREP #1 for list of chemicals on site and other hazards present on the pad.

## 2. Current Activities

### 2.1 Operations Section

#### 2.1.1 Narrative

On June 28, 2014, at approximately 0900, a fire occurred at the Statoil Eisenbarth Well Pad. Preliminary reports suggest the fire to be the result of a broken hydraulic line that sprayed fluid onto hot equipment igniting it and spreading rapidly resulting in the loss of most of the equipment and chemicals on the pad. Several volunteer fire departments responded to the scene. A one mile evacuation notice was issued for the area surrounding the Site affecting 25 residences.

At approximately 1900, fire departments ceased fire-fighting efforts and left the scene. A water curtain was maintained, using pump lines on site, to prevent the fire from spreading. Chemicals not consumed in the fire, water from firefighting efforts, and flowback from the well head migrated into rock/soils on the pad and flowed off-site via sheet flow and catch basins located in the northwest and southeast corners of the pad.

Responding agencies included but is not limited to: numerous local fire departments, Monroe County Emergency Management Agency (EMA), Ohio Department of Natural Resources Division of Oil and Gas (ODNR), Ohio Environmental Protection Agency (OEPA).

See POLREP #1 for additional details.

#### 2.1.2 Response Actions to Date

**June 28 through July 17 , 2014** - See POLREP #1 & #2 for details

#### **Week of July 18 – July 20, 2014:**

CTEH continues collecting daily surface water/sediment sampling from 15 locations between the site and the Ohio River. CTEH also continues to conduct real time air monitoring for VOCs and particulates around the pad and surrounding community. CTEH and their drilling subcontractor continue to collect subsurface soil samples along the NW slope of the pad and pad surface. Statoil continues to contain all water coming off the well pad in totes, frac-tanks and vac trucks. Daily incident command meeting continue.

- Acetone concentrations in soil/sediments in the Ohio River & tributaries are below established screening levels;
- Air monitoring results indicate VOC concentrations are below 0.1 ppm;
- PM10 concentrations on well pad range from 0.007 – 0.046 mg/m<sup>3</sup>;
- Statoil personnel continue working to automate outfall #2 pump;
- CTEH measuring water volumes in NW slope piezometers and outfall water quality;
- START provided photographic & written documentation of field activities.

#### **Week of July 21 – July 26, 2014:**

Statoil completed construction of an automated fluid recovery system at outfall location #2. CTEH continues collecting daily surface water/sediment sampling from 15 locations between the site and the Ohio River. CTEH also continues to conduct real time air monitoring for VOCs and particulates around the pad and surrounding community. CTEH and their drilling subcontractor continue to collect subsurface soil samples along the NW slope of the pad and pad surface. Daily incident command meetings were terminated on July 22, 2014. Statoil will provide daily updates to U.S. EPA via email. A milky white liquid was observed under well pad mats near sample location SW01, which appeared to be emanating from Friction Reducer (FR) 66 tanker. The liquid was contained and Statoil excavated impacted soil and staged for offsite disposal. Statoil informed START that they had spoken with oil/gas engineer who indicated that well completion sand often has acetone added as a propping agent. This likely explains why it was seen in laboratory results.

- Air monitoring results indicate VOC concentrations are below 0.1 ppm;
- PM10 concentrations on well pad range from 0.009 – 0.068 mg/m<sup>3</sup>;
- START provided photographic & written documentation of field activities;
- Statoil discussed clean up of WG3 with Halliburton, plan to be developed;
- Halliburton collecting ID tags for various pieces of equipment for insurance claim;
- Statoil constructing berms for frac-tanks and placing rock on access roads;
- ODNR representatives on site 7/24/2014 to conduct site walk;
- Statoil personnel continue to repair/replace silt fencing & erosion control measures;
- Statoil contractors demobilized excess equipment from pad.

#### **Week of July 27 – July 29, 2014:**

Water collection and containment operations continue. Statoil continues to upgrade water collection equipment. Statoil completed hard piping water lines to frac-tank at outfall #2. Statoil is working to procure transportation contractor and disposal facilities for recovered water that is currently staged in frac-tanks.

Storm event on July 27<sup>th</sup> resulted in storm water overflowing containment at recovery points #1 & #2. Statoil informed START that water was contained at last recovery point and did not reach the downstream tributary. Statoil personnel installed additional pumps & sand bags in these areas to prevent future containment overflows. CTEH continues collecting daily surface water/sediment sampling from 3-6 locations between the site and the Ohio River. CTEH also continues to conduct real time air monitoring for VOCs and particulates around the pad and surrounding community. START met with Statoil onsite representatives to discuss future activities. No date for removal of equipment has been conveyed. Halliburton to conduct final site walk on 7/31/14 to complete assessment of damaged equipment. It is anticipated no decision will be made until analytical results are received on the TCLP samples (8/1/14) to

determine if Hazwoper training is required for crane operators. Statoil, ODNR and selected environmental company (Penn E&R) will conduct meeting on 7/30 to generally discuss remediation approach.

- Air monitoring results indicate VOC concentrations are below 0.1 ppm;
- PM10 concentrations on well pad range from 0.008 – 0.055 mg/m<sup>3</sup>;
- START provided photographic & written documentation of field activities;
- Statoil contractors continue to demobilize excess equipment;
- CTEH collected 8-point composite on well pad for hazard evaluation analysis;
- START collected water samples in sumps at northwest and southeast corners of well pad;
- START collected split samples with CTEH at sample locations SW-18 & SW-25;
- START demobilized from site & will return once equipment removal operations begin.

#### **Week of August 13 – August 16, 2014:**

Statoil and its contractors mobilized cranes and shearing equipment and began to cut up the well pad equipment that was destroyed during the fire. Thirteen truckloads of scrapped material was removed offsite by trucks to the Strauss Recycling facility in Wheeling, West Virginia. Eight trailers of sand were removed offsite by Clean Harbors while another 10 trailers have been loaded for later disposal. The scrapped material will be removed offsite by trucks to the Strauss Recycling facility in Wheeling, West Virginia starting on 8/15/14. Statoil contractors continuing water containment and collection. START back on site to observe clean-up operations and to collect split samples with CTEH. CTEH continues collecting daily surface water/sediment sampling from 3-7 locations between the site and the Ohio River. START collected split samples with CTEH from 7 locations along the Opossum Creek/tributaries on 8/13/14 and from two locations on 8/14/14. CTEH also continues to conduct real time air monitoring for VOCs and particulates around the pad and surrounding community. Statoil & START then met with Halliburton personnel to discuss their strategy to remove the Acid tanker, BE-9 trailer, and the blender. Halliburton is working in a counterclockwise fashion to remove fire damaged equipment from the pad. The 33 open top trailers onsite that are being used to haul the scrap metal weigh on average 22000lbs. Halliburton plans to start removal of sand from the well pad on 8/16/14 and that the acid & be-9 trailers and the blender are going to be the last to be processed.

- Air monitoring results indicate VOC concentrations around the well pad and the surrounding community are below 0.1 ppm;
- PM10 concentrations on well pad range from 0.005 – 0.816 mg/m<sup>3</sup>;
- PM10 concentrations in the surrounding community range from 0.012 – 0.037 mg/m<sup>3</sup>;
- START provided photographic & written documentation of field activities;
- Statoil & START personnel inspected the two automated systems from the South East and South West outfall and the 24hr manned pump on the North West corner of pad;
- As of August 16, 2014, 58,960 gallons of recovered water has been removed offsite for disposal.

#### **Week of August 17 – August 23, 2014:**

Statoil and its contractors continued to cut up the well pad equipment that was destroyed during the fire. This included removal of the four sand castles and four pump engines. Statoil contractors continuing water containment and collection. The Ohio State Fire Marshal arrived onsite and informed Statoil that it wanted both the primary and secondary blenders preserved. CTEH continues collecting daily surface water/sediment sampling from locations between the site and the Ohio River. CTEH also continues to conduct real time air monitoring for VOCs and particulates around the pad and surrounding community.

- Air monitoring results indicate VOC concentrations around the well pad and the surrounding community are below 0.1 ppm;
- PM10 concentrations on well pad range from 0.008 – 2.25 mg/m<sup>3</sup>;
- PM10 concentrations in the surrounding community range from 0.005 – 0.84 mg/m<sup>3</sup>;
- START provided photographic & written documentation of field activities.

#### **Week of August 24 – August 29, 2014:**

Statoil and its contractors continued to cut up the well pad equipment that was destroyed during the fire. The HCL tanker and BE-9 trailer were removed from the well pad. START and CTEH collected two split soil samples from the former HCL tanker/BE-9 trailer locations. The two blenders requested by the Ohio State Fire Marshal were placed on flat bed trailers for offsite transport and staging in Hannibal, Ohio, where Statoil offices are located. On 8/29/14, the State Highway Patrol provided escort as the two blenders were removed from the well pad to their offsite staging location. Statoil contractors continuing water containment and collection. CTEH continues collecting daily surface water/sediment sampling from locations between the site and the Ohio River. CTEH also continues to conduct real time air monitoring for VOCs and particulates around the pad and surrounding community.

- Air monitoring results indicate VOC concentrations around the surrounding community are below 0.1 ppm. VOC concentrations around the well pad ranged from <0.1 to 1.5 ppm;
- PM10 concentrations on well pad range from 0.003 – 0.042 mg/m<sup>3</sup>;
- PM10 concentrations in the surrounding community range from 0.004 – 0.036 mg/m<sup>3</sup>;
- START provided photographic & written documentation of field activities.

#### **September 3 - 8, 2014**

Statoil contractors washed & loading damaged well pad mats into dumpsters for later offsite disposal. Salvageable well pad mats are being washed and placed on flatbed truck for removal offsite for later reuse. Once mats were removed from the well pad, Statoil removed any remaining small debris into roll-off boxes and using a dozer, scrapped the top one inch of soil from the well pad. The excavated soil/debris was placed into roll-offs for off-site disposal by Clean Harbors, Inc. Statoil contractors continuing water containment and collection.

CTEH continued to collect water samples and monitored water quality at surface water locations. Real time air monitoring for VOCs & total particulates around the well pad and surrounding community continues. CTEH also collected a waste characterization sample of the soil scrapped off the top of the well pad. Statoil informed START that Penn E&R will conduct extent of contamination soil sampling on the well pad once the sampling plan has been approved by ODNR & US EPA.

- Air monitoring results indicate VOC concentrations are below 0.1 ppm;
- PM10 concentrations on well pad range from 0.006 – 0.096 mg/m<sup>3</sup>;
- START provided photographic & written documentation of field activities;
- START demobilized from site & will return once extent of contamination

**2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)**

USEPA is in negotiations with Statoil on an Administrative Order on Consent.

**2.2 Planning Section**

**2.2.1 Anticipated Activities**

**2.2.1.1 Planned Response Activities**

Continue 24 hour/day containment and recovery operations

Characterize and delineate on- and off-site contamination and remediate as necessary.

**2.2.1.2 Next Steps**

Characterize and delineate on- and off-site contamination and remediate as necessary.

**2.2.2 Issues**

None at this time

**2.3 Logistics Section**

N/A

**2.4 Finance Section**

N/A

**Estimated Costs \***

	Budgeted	Total To Date	Remaining	% Remaining
<b>Extramural Costs</b>				
TAT/START	\$276,000.00	\$105,806.18	\$170,193.82	61.66%
<b>Intramural Costs</b>				
<b>Total Site Costs</b>	\$276,000.00	\$105,806.18	\$170,193.82	61.66%

\* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

**2.5 Other Command Staff**

N/A

**3. Participating Entities**

**3.1 Unified Command**

U.S. Environmental Protection Agency

Ohio Environmental Protection Agency

Statoil

Ohio Department of Natural Resources Division of Oil and Gas

**3.2 Cooperating Agencies**

Monroe County Emergency Management Agency

Clarington Volunteer Fire Department

ODNR Division of Wildlife

U.S. Fish and Wildlife Service

ATSDR

Ohio State Troopers

**4. Personnel On Site**

1 - EPA OSC

1 - START (Tetra Tech)

**5. Definition of Terms**

No information available at this time.

**6. Additional sources of information**

**6.1 Internet location of additional information/report**

Pending

**6.2 Reporting Schedule**

Pending

**7. Situational Reference Materials**

No information available at this time.